

### Test for Chloride Ion

1. Dissolve 3-5 mg of sample in 1 ml of 2M H<sub>2</sub>SO<sub>4</sub>. This will eliminate interference from non halides i.e.  
CO<sub>3</sub><sup>-2</sup>, CN<sup>-</sup> and S<sup>-2</sup> etc.
2. Add 10-15 mg of K<sub>2</sub>S<sub>2</sub>O<sub>8</sub>. This oxidizes Br<sup>-</sup> and I<sup>-</sup> but not Cl<sup>-</sup> to Br<sub>2</sub> or I<sub>2</sub>. A brown coloration indicates the presence of I<sub>2</sub> or Br<sub>2</sub>. This will eliminate interference from I<sup>-</sup> and Br<sup>-</sup>.
3. Heat to 100° C. for 5-10 minutes. This will drive off halides as gases Br<sub>2</sub> and I<sub>2</sub>.
4. Cool then add 2 Drops of .2M AgNO<sub>3</sub>. A white precipitate indicates the presence of Chloride (Cl<sup>-</sup>). AgF is soluble in water.

Reagents:

.2M AgNO <sub>3</sub>	340mg/10mls
.2M KCl	150mg/10mls
.2M KBr	238mg/10mls
.2M KI	330mg/10mls
2M H <sub>2</sub> SO <sub>4</sub>	11mls/100mls